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### Description of a new Mexican Subspecies of *Sceloporus spinosus* Wiegmann (Lacertilia)

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ABSTRACT: *Sceloporus spinosus caeruleopunctatus* ssp. nov., is described from Cerro de San Luis, Oaxaca, Mexico. Types at University of Kansas.

**A**MONG the specimens collected in Mexico during the summer of 1935 by Dr. Edward H. Taylor and myself are four which represent an undescribed, distinct subspecies of *Sceloporus spinosus* Wiegmann, which may be described as follows:\*

*Sceloporus spinosus caeruleopunctatus* ssp. n.

*Holotype*. EHT & HMS 8467, collected on the slopes of Cerro de San Luis, about 15 miles N. of Oaxaca, Oaxaca, August 5, 1935, by Hobart M. Smith. *Paratypes*: EHT and HMS 8464-6, from the type locality, same collector.

*Diagnosis*. Closely related to *spinosus spinosus*, differing in average scale characters and dorsal coloration. Dorsal scales from occiput to base of tail, 31 to 34 (30 or less in *s. spinosus*); ventrals, 47 to 52 (average, 45.6 in *s. spinosus*); femoral pores 9 to 13; lorilabials usually reduced to one row below subocular (rarely in *s. spinosus*); supraoculars, five to seven (rarely six, usually four in *s. spinosus*); prefrontals usually in contact medially (seldom in *s. spinosus*); some of the dorsal scales dark blue, coloration otherwise much as in *s. spinosus*.

*Description of holotype*. Head scales smooth, slightly convex, pitted; interparietal pentagonal; parietals single on either side, about two thirds size of interparietal; frontoparietals single on either side, more or less square, separated from each other medially by contact of frontal and interparietal; posterior section of frontal

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three fourths or four fifths size of anterior section; prefrontals in contact medially; three frontonasals, the lateral scales in contact with both canthals, median frontonasal distinctly larger than lateral frontonasals, and slightly larger than prefrontals; two pairs of internasals, the anterior pair separated from the rostral by a row of scales continuous with lorilabials; both pairs of internasals separated from first canthal by a small scale; supraoculars five-five, the anterior the smaller, the fourth slightly larger than others; a single, complete row of small, usually keeled scales separating supraoculars from median head scales; one complete and another incomplete row of scales separating supraoculars from superciliaries (except the first supraocular, which is in contact with first superciliary); five superciliaries visible from above; two canthals, the first not touching lorilabials nor forced above canthal ridge, the second forming a small portion of the superciliary series; subnasal present, approximately size of first canthal; loreal present, more or less square; preocular entire; subocular moderate in size, followed posteriorly by two small, strongly keeled postoculars; lorilabials in two rows, not reduced to one below subocular (usually reduced to one row); supralabials four, infralabials five-six to a point below middle of eye.

Mental pentagonal, with a labial border about three fifths that of rostral; mental followed posteriorly by three pairs of postmentals, the scales of only the anterior pair in contact medially; outer row of labiomentals separated from mental by partial contact of first postmental and first infralabial; inner row of labiomentals terminating below third infralabial; gular scales smooth, with one or two apical notches (usually one); anterior gular scales rounded, reduced in size; posterior gular scales subequal in size; gular scales below ear weakly keeled; scales in gular fold region with two or three apical notches.

Auricular lobules three, the upper the longest, but not reaching across ear; auricular lobules larger than preceding temporal scales; temporal scales weakly keeled, weakly mucronate toward eye, more strongly toward ear, somewhat smaller than largest scales between ear and lateral nuchal fold; ridge of skin overlapping lateral nuchal fold surmounted by strongly keeled, very strongly mucronate scales, which continue in an irregular row to a point below ear; scales between ear and insertion of foreleg keeled, rather strongly mucronate, strongly denticulate.

Dorsal scales keeled, rather strongly mucronate, denticulate, in parallel rows, the scales toward occiput reduced in size; median

lateral scales of somewhat the same general character as the dorsal scales, somewhat smaller than dorsal scales, somewhat more strongly keeled, in oblique rows; lateral scales toward axilla and groin becoming smaller, those in axilla almost granular, those in groin one half as large as median lateral scales, imbricating; ventral scales about one half or three fifths size of dorsal scales; scales on chest slightly larger than those on belly; interfemoral and preanal scales not or very slightly smaller than scales on belly; some of preanal scales rather porelike; all ventral scales smooth, with a single apical notch; dorsal scales on rump very slightly reduced in size; basal caudals on dorsal surface as large as largest dorsal scales on body; dorsal caudals strongly keeled, strongly mucronate, not or weakly denticulate, becoming smaller and more strongly keeled toward tip of tail; subcaudals smooth, rounded, becoming keeled distally on tail; enlarged postanals present, separated from each other medially by two small scales.

Dorsal scales of foreleg keeled, mucronate, denticulate, those on upper foreleg about one third size of dorsal scales on body, somewhat larger than those on lower foreleg; scales at elbow reduced in size; ventral scales of lower foreleg about as large as dorsal scales of same member, keeled except at extreme anterior edge; ventral scales on upper foreleg smooth (keeled anteriorly), usually notched, about one half or two thirds size of ventrals of lower forelegs, becoming smaller near axilla; lamellar formula for fingers 8-12-16-16-9 (8-12-16-16-10).

Dorsal scales of hind leg rather strongly keeled, mucronate, weakly denticulate, those on thigh somewhat larger than those on upper foreleg; dorsals on shank somewhat larger than those on thigh; ventral scales of shank smooth, notched, as large as dorsal scales of same member; scales on anterior surface of thigh nearly smooth, acuminate, with a single notch on either side of apex, the scales becoming quite smooth, with a single apical notch, and much smaller toward series of femoral pores; scales in a median area on posterior surface of thigh keeled, mucronate, much smaller than preanal scales; no postfemoral dermal pocket; lamellar formula for toes 8-13-16-19-12 (8-13-17-19-12).

*Color.* General dorsal coloration brownish-yellow; a dorsolateral light line on each side, about one and one half scales wide, extending from temporal region onto base of tail; below this the ground color is darker, sometimes concentrated into broad, indistinct dark bars separated by narrow lighter areas, not passing onto ventral surface

of abdomen; between the dorsolateral light lines are a number of dark-blue scales (the color usually fades in preservative) apparently arranged in two irregular rows; the heads of the two males are slate (rather dark in type), with numerous white flecks; among these the most distinct are: a light spot on each parietal, a light pineal spot with a small, dark, central spot, a light spot on each side at the posterior edge of interparietal, a light spot on each frontoparietal, a light, narrow bar across posterior section of frontal, and a light spot at the posterior, medial edge of the third supraocular; in the males an indefinite, brownish band crosses the head in front of the eyes, and is preceded by a darker brown area extending to the internasals; the internasal area, to the rostral, is light brown; the labia are irregularly marked with dark and very light brown; a dark spot in front of arm, extending dorsally a short distance, with a few scales of dark-blue color; the black shoulder spots are narrowly continuous with each other across neck; in the type, the anterior part of the gular area is white, the posterior part blue; in the male paratype, the whole throat is dark blue; in both specimens black, or dark blue, convergent bars are present in the gular region; the chest, a narrow area down middle of abdomen, prenatal region and the posterior part of the ventral surface of the thighs are white; on each side of belly is a broad area of blue, bordered medially by a narrow area of black or dark blue; the groin is black or dark blue, the color extending onto thighs; the chest has a few irregular spots of black.

In the females two rows of irregular, dark-brown spots are present between the dorsolateral light lines; the throat has indistinct bluish bars, and the sides of the abdomen have a bluish tinge.

The following notes from the field catalogue are pertinent: "*Large male*. Lighter parts of labial region and lighter parts of back tinged with reddish-orange, more distinct on head. Posterior gular region dark blue; sides of belly lighter, tinged with light green. Some of the scales of the back between the dorsolateral light lines dark blue. *Smaller male*. Lacks orange color of head. *Female*. In life, when shot, the blue spots on the back were very distinct. A few hours later, before preservation, the color had disappeared."

*Habits and habitat*. All specimens were found running about on the ground at low elevations, in more or less open areas, usually near rocks. They always ran into rocks or bushes at the first indication of danger, and were rather difficult to collect.

*Remarks.* According to my notes, taken hurriedly on a recent short trip to eastern museums, the following specimens apparently belong to this subspecies: AMNH 18804-14 (Tlacolula to San Pablo Mitla, Oaxaca, July 11-13, 1920, Paul D. R. Rütthling); FMNH 1011 (Oaxaca, Oaxaca, June, 1901, S. E. Meek); USNM 47534-5, 47396-7 (Oaxaca, Oaxaca, June 14, 1894, Nelson & Goldman).

## Measurements (in mm.) and Scale Counts

Number.....	8465	8466	8464	8467
Snout to vent.....	80.0	82.0	82.5	94.0
Snout to occiput.....	15.0	15.0	15.0	17.0
Snout to ear.....	16.9	18.4	18.2	20.5
Hind leg.....	54.0	58.7	53.5	61.6
Fourth toe.....	20.7	22.4	20.5	23.0
Fifth toe.....	10.1	9.7	9.2	11.0
Tibia.....	15.9	16.8	14.6	17.0
Scales to head length.....	6.2	5.1	6.2	6.0
Lamellae, fourth toe.....	19-20	20-21	21-22	19-20
Femoral pores.....	12-13	10-12	11-12	9-12
Sex.....	♀	♂	♀	♂
Tail.....	100.0	115.0	103.0	126.0
Dorsals.....	34	31	33	31
Ventrals.....	51	47	52	52
Scales around body.....	42	38	43	40